

**United States Environmental Protection Agency
Criminal Investigation Division
Investigative Activity Report**

Case Number:

0900-0460

Case Title:

Hunters Point Shipyard

Subject of Report:

December 15, 2016 Interview of [REDACTED]

Reporting Office:

San Francisco, CA, Area Office

Activity Date:

December 15, 2016

Reporting Official and Date:

[REDACTED]
Special Agent

18-JAN-2017, Signed by: [REDACTED]

Approving Official and Date:

[REDACTED]
Special Agent in Charge
18-JAN-2017, Approved by: [REDACTED]
Special Agent in Charge

SYNOPSIS

December 15, 2016 Interview of [REDACTED]

DETAILS

On December 15, 2016, Special Agents (SAs) [REDACTED] (EPACID) and Jay Bigoness (Nuclear Regulatory Commission Office of Investigations), Regional Criminal Enforcement Counsel (RCEC) Katherine Shine, and Assistant United States Attorneys (AUSAs) Phil Kearney and Matt McCarthy interviewed [REDACTED]. Also present was [REDACTED], counsel for [REDACTED].

Prior to the start of the interview, [REDACTED] was advised of the nature and the purpose of the interview and [REDACTED] provided the following information:

[REDACTED] said that [REDACTED] obtained a degree in Biomedical Physics from Fresno State University in 2008. After that, [REDACTED] began working as a lab technician for [REDACTED], a firm that did radiological remediation work in the Bay Area. [REDACTED] said that [REDACTED] was working at Treasure Island. [REDACTED] main supervisor was [REDACTED] and [REDACTED] on-site supervisor was [REDACTED] LNU (not [REDACTED]). [REDACTED] then moved to [REDACTED] around 2009 or possibly 2010, where [REDACTED] worked at Hunters Point. [REDACTED] described [REDACTED] position as a health physicist as mostly an in-the-office job. [REDACTED] reported to [REDACTED] and [REDACTED], both of whom were consulting health physicists. [REDACTED] was also the president of the company and [REDACTED] did a lot of the work. [REDACTED] duties included report writing and data analysis.

[REDACTED] said that [REDACTED] was with [REDACTED] for a few years until [REDACTED] was hired by [REDACTED] around 2013. [REDACTED] said that [REDACTED] is not certain of dates. In [REDACTED] position, [REDACTED] continued to work as a health physicist and was also a Radiation Safety Officer Representative. [REDACTED] duties were similar to those at [REDACTED]. [REDACTED] reviewed a lot of data and wrote reports. Mostly [REDACTED] reviewed lab data from the field. [REDACTED] said that [REDACTED] spent a bit of time at Treasure Island while working for [REDACTED], but [REDACTED] was mostly at Hunters Point.

[REDACTED] said that the data [REDACTED] reviewed included radiological surveys from the field. The data would come in to be uploaded to a database and then reports would be printed out. Ultimately this data went in to Final Status Survey Reports.

[REDACTED] said that his supervisor was [REDACTED] until [REDACTED] left a couple of years ago. [REDACTED] said that [REDACTED] was not on-site, but rather worked mostly from [REDACTED] home in Virginia. The people on-site included the project managers and lab people, among others. There were approximately four trailers which were connected together. Each person had their own office. [REDACTED] said that [REDACTED] interacted with [REDACTED], the person who managed the database. [REDACTED] was also involved in the day-to-day data management. [REDACTED] said that there were some radiological supervisors and project supervisors in the trailers

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whose offices were close to one another.

████ said that TetraTech had a lab on-site. They had a trailer for gamma spec and the people who operated the lab. The lab was operated by New World, then by RSRS, and then by Curtis & Tompkins. There were also conex boxes on site to store equipment. A lot of the technicians operated out of the buildings on-site and stored some equipment there. The work was driven by the data coming in. When a site was clean, there was a report to write.

████ said that there were two different types of soil sampling – systematic and investigative, or bias sampling. Bias or investigative sampling usually involved doing a gamma scan first. If the site was outdoors, the technicians would be walking with a hand-held instrument or using a towed array. After doing the gamma scan, the data would be analyzed for hot spots. If there were hot spots, they would be identified with GPS coordinates. █████ was the Computer Assisted Design (CAD) person. █████ would use either the CAD software or GIS software to plot the hot spot locations on a figure.

The engineers would then go out to the area to physically mark the hot spots. If they weren't able to use GPS, the location of the hot spot would be described as being in a particular lane. The engineers/technicians who marked the hot spots were █████ and █████. They would mark the locations with spray paint or with flags.

████ said that it was █████ job to analyze the data to determine if there were hot spots. There were different ways to do this. This might involve looking at background or the "Z score" of the survey unit.

After the hot spots were marked, a technician would sample it when they had time. The technician would usually perform a scan also. The scan was supposed to be performed both before and after sample collection. The purpose of the scan was to know if they were sending something really hot to the lab.

████ said that the time between marking a hot spot and collecting a sample could vary. It was usually collected within a day or two, but they might hold off in wet weather until the soil had dried out a bit.

████ said that there was lots of import fill at Hunters Point and that this made it difficult to pick an appropriate background. Sometimes the background readings were really low and would make an area look hotter by comparison. █████ recalled that some areas were hotter than others. █████ said that there was a lot of cesium in 707 and also some elevated contamination in the 500 series.

████ then discussed systematic sampling. █████ said that in systematic sampling, the sampling locations are predetermined. A Visual Sampling Plan (VSP) is used to lay out the sampling locations. For building soil samples, they would collect 20 systematic samples. Eighteen systematic samples would be collected from the Radiological Screening Yard (RSY). █████ said that the number of systematic samples varied by the Task Specific Plan (TSP).

The VSP is software that the CAD person would utilize to determine sampling locations. You input the number of samples to be collected and the general size of the area and the software tells you where to collect the samples. The software grids out evenly spaced sampling locations. █████ would do this, sometimes with assistance from █████ and █████. █████ was an engineering intern who briefly assisted with this task.

████ and █████ would then go out to mark the sampling locations. They would typically use a tape measure to mark a known distance from a particular corner, for example. █████ and █████ would then flag the sampling

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locations or use paint to identify them. They would indicate the sample number. [REDACTED] and [REDACTED] would be using a figure/map to mark the locations, and the sampling technicians would also get a copy of that map when they went out to collect the actual samples. [REDACTED] described the soil samples as surface samples and guessed that the technicians should not be digging down any deeper than six inches.

[REDACTED] said that there were a lot of sampling technicians, all of whom were supervised by [REDACTED], [REDACTED].

[REDACTED] said that the samplers would tell [REDACTED] where they would be sampling, and [REDACTED] would give them the needed Chains of Custody. [REDACTED] would also print out labels to attach to the Ziploc bags that would contain the collected soil sample.

[REDACTED] was then shown BFS02358, a Chain of Custody (COC) Record for samples collected April 10, 2012. [REDACTED] said that when the samplers received the COC from [REDACTED], the Sample ID Numbers and dates had already been filled in. The bar codes that appear in the "SAMPLE ID" column would also already be on the COC. [REDACTED] said that the bar codes were entered later on so that the lab could just scan them for the Sample ID number.

[REDACTED] said that there is a convention for creating Sample ID numbers, which is described in the Sampling Analysis Plan (SAP). The first Sample ID Number on this COC is 07517-S0002-F123-01. The 07517, for example, refers to a sample collected under Contract Task Order (CTO) 7 at Building 517. "S" refers to the Survey Unit, so 2 is SU2. [REDACTED] thinks the "F" in "F123-01" stands for floor. The actual sample number is 123. "01" is used in case there is a need to collect multiple samples at the same location. [REDACTED] said that TetraTech creates the SAP and that there is usually a separate SAP for each CTO.

The bar codes have adhesive labels so that they can be affixed to the Ziploc bag. The sampled soil goes into the Ziploc, it is sealed and the label is attached. The sample is then scanned to make sure that it is okay for the lab. The sampler fills out the time the samples were collected. The sampler turns the samples over to the lab.

[REDACTED] said that [REDACTED] did not interact much with [REDACTED]. [REDACTED] said that [REDACTED]'s role is to help with the generation of the SAP. He is not sure if [REDACTED] was the main supervisor at the lab. [REDACTED] is not someone [REDACTED] dealt with as [REDACTED] was not on-site.

[REDACTED] said that [REDACTED] was "not really" ever in the field during sample collection. [REDACTED] said that [REDACTED] spent some time in the field before [REDACTED] was hired by [REDACTED], so [REDACTED] has some soil sampling experience. [REDACTED] said that [REDACTED] never saw anything outside of the proper sampling protocols and [REDACTED] never heard any talk of that.

[REDACTED] said that, once at the lab, the samples would be analyzed. The on-site lab did gamma spec. They would process the sample and put it in pans to dry because moisture effects the analysis. Then the soil would be put into a tuna can. The tuna can provides the proper geometry needed to analyze the sample. The leftover soil in the bag is set aside in case it is needed. The samples are tested for various radionuclides, such as cesium and radium.

Additional analysis is performed at Test America, possibly for strontium. [REDACTED] said that [REDACTED] thinks that once TetraTech knew that they were done with cleaning an area, the extra dirt would be discarded using the Navy's waste contractor. The dirt in the tuna can would be kept. [REDACTED] said that, as far as [REDACTED] knows, the tuna cans are stored in Building 258 at Hunters Point. The material technically belongs to the Navy.

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█████ would get the data from the analysis of the contents of the tuna cans at the on-site lab from █████. █████ worked for █████, then for █████, and then for █████. █████ identified █████ as people in the lab who reported to █████.

█████ would send out the analytical report, also known as an Electronic Data Deliverable (EDD). The data would be uploaded to a database. █████ would send █████ a zip file containing multiple files. Each sample would have its own report. The EDD is separate from the analytical report but contains the same information, possible in a CSV file extension. It is the same data, but provided in a different format so that it can be uploaded into the database.

█████, who worked for TetraTech, handled the uploading of the data to the database. There were databases for soil. █████ uploaded the data to a sequel server. This allowed for faster access to the data.

Once █████ had received the data, █████ would review it. █████ would look at the area and the associated release criteria and say whether it was okay or not. █████ would determine whether the data looked acceptable and whether the soil was below the release criteria, i.e. is the site clean, or is more work needed?

If the site was not clean and more work was needed, for soil, they would have to characterize the extent of the contamination. █████ would identify the location in the figure and tell them █████ wanted additional samples. █████ would get a pdf map and █████ would put dots on the map and send that map to █████. █████ would then put the information on the official map/figure. █████ said that █████ relied on his professional judgment – not the SAP – to determine how many additional samples were needed.

█████ reiterated that the characterization samples bound the area to be remediated. After remediation, post-remediation sampling takes place to see if there is contamination further down. If the area is believed to be clean, a systematic set of samples is needed. Locations for the systematic samples are generated by the VSP, as discussed earlier. Once again, if the samples show the area to be contaminated, the area of contamination must be bounded and remediated.

█████ said that early on, this would always trigger a completely new set of systematic samples. Eventually, TetraTech got the Navy to buy off on just replacing a hot systematic sample with a replacement systematic sample. █████ said that █████ thinks this change was made while working in the 500 Series or in the 707 Triangle. This may have been in 2011 or 2012.

█████ said that the plans had always specified that TetraTech would collect a completely new set of systematic samples, but █████ thinks that Abkemeier talked to █████, █████ Point of Contact at Navy Radiological Affairs Support Office (RASO). █████ said that the change in the sampling protocol may have been █████ idea.

Once the systematic samples show the area to be clean, the data goes into a report. █████ uses the data to generate tables for the report. █████ writes the Final Status Survey Reports (FSSs).

█████ was then shown Bates TTHP-GJ-00003613. █████ said that this is the figure generated by █████. Normally this figure would be in color, as would the symbols in the accompanying legend. This figure shows the samples collected in this area. Samples 1-7 are biased samples, i.e. hot spots based on the scan. Samples 8-43 are systematic samples, laid out in a grid. Samples 44-62 are characterization samples and are clear. █████ noted, as described in the email at Bates TTHP-GJ-00003611, samples 1, 2, 3, 13, 14, 15 and 16 were hot and so they required characterization and remediation. Samples 63-70 are post-remediation, to make sure they got all the contamination.

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Sample 71 is a biased sample. As described in the January 29, 2012 email at Bates TTHP-GJ-00003608, the survey unit boundary was extended. Sample 71 is on the boundary. Samples 72-107 are systematic samples, but samples 81 and 96 were hot, and this triggered additional characterization to bound the extent of the contamination. Samples 108-118 are characterization samples. As described in the March 2, 2012 email at Bates TTHP-GJ-00003606, some of those samples were elevated for radium-226. Remediation took place, and then samples 119-122 are post-remediation samples. Samples 123-158 are systematic samples to show the area is clean.

█████ said that █████ gets one figure from █████ initially, and then █████ adds data to that figure as the data is gathered. There is one record copy. There is also a field copy which is "clean," meaning that it shows only the locations to be sampled.

█████ verified that the figure/map is created before the COC is generated.

█████ said that there would be another email after the April 23, 2012 email at Bates TTPH-GJ-00003602. The other email would transmit the results generated by TestAmerica for strontium or plutonium. The TestAmerica results would go to █████ and █████ would send the results to █████ and then █████ would generate the final email to distribute to the same people who received the April 23, 2012 email.

█████ was asked if any of the data █████ reviewed appeared suspect to █████ said that the way that █████ goes through data is that █████ would take it and put it through a program using an access database. This would help determine what was elevated and would save █████ from reviewing hundreds of pages of data every day. The program would identify elevated levels that would require additional sampling. If the samples were clean, they could move on.

█████ said that █████ did not find any surprises in the data. There were Minimal Detectable Activity limits that TetraTech had to be able to meet. For example, if the level required for free release is 1 picocurie/gram, the lab needs to be able to detect .7 picocuries/gram.

Regarding █████ signature block on the emails (Bates TTHP-GJ-00003602-3650), █████ said that at that time, █████ was still an employee of █████, even though █████ had a █████ email address.

At this time, a break was taken.

█████ then discussed preparation of FSS reports. The report-writing process begins once the site is determined to be clean. █████ said that █████ tries to follow a template for the report, so █████ would typically find the last report done and would use that as a template. Before █████ wrote FSS reports, they were prepared by █████ and █████. █████ helped with one or two of them. █████ of TetraTech would help out if █████ had time.

█████ clarified that █████ receives the tuna cans to do their gamma spec analysis, along with dirt from the Ziploc bags for the strontium or plutonium analysis. The analysis done by TestAmerica depends on what is specified in the relevant Task Specific Plan. It may specify, for example, that 10% of the samples from the systematic sampling be analyzed by TestAmerica, or it may require that 100% of those samples are analyzed by TestAmerica. The requirements are in the Task Specific Plan as well as the Sampling Analysis Plan.

█████ said that, at one point, the on-site lab was used only as a screening lab. Ten percent of the samples

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were sent to an outside lab for Quality Assurance. Then this changed and they had to do 100% definitive analysis, but the on-site lab couldn't do this, so the samples were sent to TestAmerica. Then the on-site lab got certified for gamma spec and continued to use TestAmerica for strontium and alpha spec analysis.

Returning to the FSS reports, [REDACTED] said that [REDACTED] prepared the FSS for 707, which is still with the Navy. He also did a revision of the 500 Series, which was originally written by [REDACTED], and also did a revision of the FSS for the North Pier. [REDACTED], the RSO for [REDACTED], and the Project Managers worked on it as well.

[REDACTED] said that [REDACTED] would always review and comment. When [REDACTED] worked for [REDACTED], [REDACTED] and [REDACTED] reviewed it as well. Once the document was okay internally, [REDACTED] would send it to the Navy by email and sometimes also send a CD if the files were too big. [REDACTED] would send it to the RASO, cc'ing someone at the Base Realignment and Closure (BRAC) office, typically Chris Yantos. The internal draft of the FSS went to the RASO for comment. The Navy handled the distribution of the FSS to the regulatory agencies. Once the California Department of Public Health (CDPH) and California Department of Toxic Substances Control (DTSC) approve the document, it is done.

[REDACTED] said that [REDACTED] thinks [REDACTED] might review the FSS because [REDACTED] uses it to write the RACRs.

[REDACTED] then reviewed Bates TTHP-GJ-00002878-2901 relating to Building 707 Triangle Area, Survey Unit 16. [REDACTED] noted that the figure in this packet is in a different format. The analytical data is included on the same page as the map because there were so many hits. Normally, there would just be a figure showing SU16. This format gives some context to the hits.

707 Triangle had a lot of hits. [REDACTED] said much of this was due to fallout of cesium for nuclear testing. [REDACTED] said that the sample results [REDACTED] transmitted in [REDACTED] June 14, 2011 email are clean and that is why [REDACTED] is transmitting them. If the samples were hot, [REDACTED] would specify that in the body of [REDACTED] email.

[REDACTED] then reviewed Bates TTHP-GJ-00003898-3921 relating to Building 707 Triangle Area, Survey Unit 17. [REDACTED] said that this is the same type of packet as the others, but relates to a different survey unit. [REDACTED] noted that for this email, the chain of the earlier emails (transmitting earlier sampling data) is not included. [REDACTED] said that [REDACTED] may have been sending out information on multiple survey units in one email and then created a new email chain for the units that had a need for additional sampling.

[REDACTED] then reviewed Bates TTHP-GJ-00002926-2948 relating to Building 707 Triangle Area, Survey Unit 9. [REDACTED] noted that although the figure is not attached to this email, [REDACTED] email identifies it as being attached. The file name is 707_SURVEY UNITS-Record.pdf.

[REDACTED] then reviewed Bates TTHP-GJ-00003466-3497 relating to Building 707 Triangle Area, Survey Unit 23. The figure prepared by [REDACTED] is at TTHP-GJ-00003471. Bates TTHP-GJ-00003496 is a sigma map, representing information from gamma scans from the towed array. The original would be color-coded with a color-coded key on the side. [REDACTED] said that the investigation level here was anything above 3 sigma. It is included here because the Navy would get emails of the gamma scans as an attachment to the first email. Bates TTHP-GJ-00003497 is a contour map showing more gamma scan data.

[REDACTED] then reviewed Bates TTHP-GJ-00003103-3129 relating to the North Pier, Survey Unit 1. [REDACTED] noted that, as stated on TTHP-GJ-00003104, the TSP for the North Pier required 100% of the final systematic to be analyzed by gamma spec and 10% of the final systematic to be analyzed for total strontium and Pu-239.

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████ said that the North Pier had a concrete portion and a portion that was asphalt over soil. █████ recalled that a contaminated device was found in the asphalt and also that a portion of the concrete had to be remediated. █████ did not recall any complaints from the sampling technicians about sampling at the North Pier. █████ recalled that there were safety concerns relating to working so closely to the water.

████ then reviewed Bates TTHP-GJ-00003130-3158 relating to the North Pier, Survey Unit 8. █████ said that there would be another email following this one, which would transmit the definitive results. The turnaround time was usually around 21 days. The figure is at Bates TTHP-GJ-00003137, with lab results on the following pages showing the site to be clean.

████ then reviewed Bates TTHP-GJ-00003159-3186 relating to the North Pier, Survey Unit 10. The figure is at Bates TTHP-GJ-00003165.

████ also reviewed Bates TTHP-GJ-00005575-5621, Final Final Status Survey Results, May 2016, North Pier. Reviewing Bates TTHP-GJ-00005599, █████ said that there were rocks running through the survey units. The darker gray areas on Bates TTHP-GJ-00005601 are concrete. █████ cannot recall if there was originally asphalt on top. █████ said that this FSS is final. If it were a draft, that would be indicated on the title page. This document would include comments from the regulators as an attachment.

████ then reviewed Bates TTHP-GJ-00003245-3274, relating to the North Pier, Survey Unit 7. The figure in this packet is at Bates TTHP-GJ-00003253 and represents where the samples were collected in this survey unit. The final results from the off-site lab are pending.

████ then reviewed Bates TTHP-GJ-00003275-3303, relating to the North Pier, Survey Unit 11. The figure/map in this packet is at Bates TTHP-GJ-00003282. It reflects the location of the sampling points for this survey unit.

████ then reviewed Bates TTHP-GJ-00003959-3991, relating to Former Shacks 79/80, Survey Unit 2. The figure/map in this packet is at Bates TTHP-GJ-00003961 and it reflects the sampling locations for this survey unit.

████ said that █████ is still currently employed by █████ and that █████ current supervisor is █████. █████ has the same job title, but █████ no longer works at the Hunters Point site. █████ is now based in Clovis although █████ is still wrapping up some work on Hunters Point. █████ is working on addressing comments from the State of California on the Survey Unit Project Report.

████ said that █████ has no role in the invoicing process.

████ said that █████ is not aware of corners being cut on the Hunters Point project. █████ spent █████ time in the office mostly and sometimes joked with █████ that █████ could do █████ job remotely. Sometimes █████ would get questions relating to the Task Specific Plan. █████ said that █████ did not detect any sense of urgency in █████ discussions with the technicians or supervisors working at Hunters Point.

████ does not think that there is a single map that depicts all of the survey units at Hunters Point, but that █████ was the map guy.

████ said that █████ did not participate in the morning meetings that were attended by the field people.

████ said that █████ was the Project Manager. █████ would talk to █████ and answer

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questions posed by [REDACTED] would normally interact with the Navy. If they needed a table of data or needed more information on the progress with a particular survey unit, they could ask [REDACTED]. [REDACTED] said that neither [REDACTED] ever expressed frustration about the survey units taking longer to clean up than they should. [REDACTED] said that [REDACTED] never heard anyone direct anyone else to collect clean dirt for samples.

[REDACTED] said that [REDACTED] became aware of the anomalous data when the Navy brought it to their attention. The Navy compared one set of data to another and saw differences. The Navy – either Matt Slack or Zach Edwards- contacted [REDACTED]. [REDACTED] learned of the Navy's inquiry from [REDACTED].

[REDACTED] said that [REDACTED] looked at the data the Navy questioned and [REDACTED] said that it was "definitely strange." [REDACTED] said that they normally only look at certain Radionuclides Of Concern (ROCs), but here the K (Potassium) levels were off. The K levels were much lower than anticipated. [REDACTED] conclusion was that the test results could vary for lots of different reasons. [REDACTED] wondered initially if a different layer of soil had been sampled. [REDACTED] said that one of the things [REDACTED] and others concluded in the investigation report was that maybe the soil was taken from another location.

[REDACTED] said that after the Navy identified its concern, they went over all their data. [REDACTED] said that there is an element of subjectivity in defining what "anomalous" results are. For example, if you normally see 10 as a level, is 5 anomalous? Is 3 anomalous? [REDACTED] said that they wanted to work with the Navy to develop criteria as to what constituted an anomaly. TetraTech came up with a number of criteria, but could not get the Navy to agree to any particular criteria. [REDACTED] said that, in [REDACTED] opinion, the Navy had issues with making decisions on concrete numbers.

TetraTech resampled certain areas. The Navy asked for additional sampling in other areas, but wouldn't specify why. [REDACTED] said that Matt Slack and Zach Edwards were the RASO representatives on this matter. There may have also been someone else who helped with RASO's review.

[REDACTED] said that [REDACTED] is not aware of any bonuses under the contract. [REDACTED] does not think [REDACTED] got a bonus during [REDACTED] first year at Hunters Point, but [REDACTED] thinks [REDACTED] got a raise.

[REDACTED] provided no additional information.